DAIKIN

altherma

## Heating

# Technical Data

**Daikin Altherma low temperature split**

**EEDEN13-725A**

ERLQ-CW1

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# 1 Features

- Energy efficient heating system based on air source heat pump technology
- Cost effective alternative to a fossil fuel boiler
- Low energy bills and low CO2 emissions
- Easy to install

Inverter

# 2 Specifications



| CONNECTABLE INDOOR UNITS | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2-1 Nominal Capacity And Nominal Input | | | | EHBH16C3V/ ERLQ011CW1 | EHBH16C9W/ ERLQ011CW1 | EHBH16C3V/ ERLQ014CW1 | EHBH16C9W/ ERLQ014CW1 | EHBH16C3V/ ERLQ016CW1 | EHBH16C9W/ ERLQ016CW1 |
| Heating capacity | Nom. | | kW | 11.2 (1) / 11.00 (2) | | 14.5 (1) / 13.60 (2) | | 16 (1) / 15.20 (2) | |
| | Max. | | kW | 8.6 (3) / 8.60 (4) | | 10.6 (3) / 10.80 (4) | | 11.4 (3) / 10.90 (4) | |
| Power input | Heating | Nom. | kW | 2.43 (1) / 3.10 (2) | | 3.37 (1) / 4.10 (2) | | 3.76 (1) / 4.66 (2) | |
| | | Max. | kW | 3.13 (3) / 4.10 (4) | | 4.00 (3) / 5.19 (4) | | 4.32 (3) / 5.22 (4) | |
| COP | | | | 4.6 (1) / 2.75 (3) / 3.55 (2) / 2.10 (4) | | 4.3 (1) / 2.65 (3) / 3.32 (2) / 2.08 (4) | | 4.25 (1) / 2.64 (3) / 3.26 (2) / 2.09 (4) | |

**Notes**

(1) Condition 1: cooling Ta 35°C - LWE 18°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C)

(2) Condition 2: cooling Ta 35°C - LWE 7°C ( DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C ( DT = 5°C )

(3) Condition 3: heating Ta DB -7°C (RH85%) - LWC 35°C

(4) Condition 4: heating Ta DB -7°C (RH85%) - LWC 45°C

| CONNECTABLE INDOOR UNITS | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2-2 Nominal Capacity And Nominal Input | | | | EHBX16C3V/ ERLQ011CW1 | EHBX16C9W/ ERLQ011CW1 | EHBX16C3V/ ERLQ014CW1 | EHBX16C9W/ ERLQ014CW1 | EHBX16C3V/ ERLQ016CW1 | EHBX16C9W/ ERLQ016CW1 |
| Heating capacity | Nom. | | kW | 11.2 (1) / 11.00 (2) | | 14.5 (1) / 13.60 (2) | | 16 (1) / 15.20 (2) | |
| | Max. | | kW | 8.6 (3) / 8.60 (4) | | 10.6 (3) / 10.80 (4) | | 11.4 (3) / 10.90 (4) | |
| Cooling capacity | Nom. | | kW | 15.05 (1) / 11.72 (2) | | 16.06 (1) / 12.55 (2) | | 16.76 (1) / 13.12 (2) | |
| Power input | Heating | Nom. | kW | 2.43 (1) / 3.10 (2) | | 3.37 (1) / 4.10 (2) | | 3.76 (1) / 4.66 (2) | |
| | | Max. | kW | 3.13 (3) / 4.10 (4) | | 4.00 (3) / 5.19 (4) | | 4.32 (3) / 5.22 (4) | |
| | Cooling | Nom. | kW | 4.53 (1) / 4.31 (2) | | 5.43 (1) / 5.08 (2) | | 6.16 (1) / 5.73 (2) | |
| COP | | | | 4.6 (1) / 2.75 (3) / 3.55 (2) / 2.10 (4) | | 4.3 (1) / 2.65 (3) / 3.32 (2) / 2.08 (4) | | 4.25 (1) / 2.64 (3) / 3.26 (2) / 2.09 (4) | |
| EER | | | | 3.32 (1) / 2.72 (2) | | 2.96 (1) / 2.47 (2) | | 2.72 (1) / 2.29 (2) | |

**Notes**

(1) Condition 1: cooling Ta 35°C - LWE 18°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C)

(2) Condition 2: cooling Ta 35°C - LWE 7°C ( DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C ( DT = 5°C )

(3) Condition 3: heating Ta DB -7°C (RH85%) - LWC 35°C

(4) Condition 4: heating Ta DB -7°C (RH85%) - LWC 45°C

| CONNECTABLE INDOOR UNITS | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2-3 Nominal Capacity And Nominal Input | | | | EHVH16S18C3V /ERLQ011CW1 | EHVH16S26C9W/ ERLQ011CW1 | EHVH16S18C3V /ERLQ014CW1 | EHVH16S26C9W/ ERLQ014CW1 | EHVH16S18C3V /ERLQ016CW1 | EHVH16S26C9W/ ERLQ016CW1 |
| Heating capacity | Nom. | | kW | 11.2 (1) / 11.00 (2) | | 14.5 (1) / 13.60 (2) | | 16 (1) / 15.20 (2) | |
| | Max. | | kW | 8.6 (3) / 8.60 (4) | | 10.6 (3) / 10.80 (4) | | 11.4 (3) / 10.90 (4) | |
| Power input | Heating | Nom. | kW | 2.43 (1) / 3.10 (2) | | 3.37 (1) / 4.10 (2) | | 3.76 (1) / 4.66 (2) | |
| | | Max. | kW | 3.13 (3) / 4.10 (4) | | 4.00 (3) / 5.19 (4) | | 4.32 (3) / 5.22 (4) | |
| COP | | | | 4.6 (1) / 2.75 (3) / 3.55 (2) / 2.10 (4) | | 4.3 (1) / 2.65 (3) / 3.32 (2) / 2.08 (4) | | 4.25 (1) / 2.64 (3) / 3.26 (2) / 2.09 (4) | |

**Notes**

(1) Condition 1: cooling Ta 35°C - LWE 18°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C)

(2) Condition 2: cooling Ta 35°C - LWE 7°C ( DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C ( DT = 5°C )

(3) Condition 3: heating Ta DB -7°C (RH85%) - LWC 35°C

(4) Condition 4: heating Ta DB -7°C (RH85%) - LWC 45°C

| CONNECTABLE INDOOR UNITS | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2-4 Nominal Capacity And Nominal Input | | | | EHVX16S18C3V /ERLQ011CW1 | EHVX16S26C9W/ ERLQ011CW1 | EHVX16S18C3V /ERLQ014CW1 | EHVX16S26C9W/ ERLQ014CW1 | EHVX16S18C3V /ERLQ016CW1 | EHVX16S26C9W/ ERLQ016CW1 |
| Heating capacity | Nom. | | kW | 11.2 (1) / 11.00 (2) | | 14.5 (1) / 13.60 (2) | | 16 (1) / 15.20 (2) | |
| | Max. | | kW | 8.6 (3) / 8.60 (4) | | 10.6 (3) / 10.80 (4) | | 11.4 (3) / 10.90 (4) | |
| Cooling capacity | Nom. | | kW | 15.05 (1) / 11.72 (2) | | 16.06 (1) / 12.55 (2) | | 16.76 (1) / 13.12 (2) | |

# 2 Specifications

| CONNECTABLE INDOOR UNITS | | | | | | |
|---|---|---|---|---|---|---|
| Power input | Heating | Nom. | kW | 2.43 (1) / 3.10 (2) | 3.37 (1) / 4.10 (2) | 3.76 (1) / 4.66 (2) |
| | | Max. | kW | 3.13 (3) / 4.10 (4) | 4.00 (3) / 5.19 (4) | 4.32 (3) / 5.22 (4) |
| | Cooling | Nom. | kW | 4.53 (1) / 4.31 (2) | 5.43 (1) / 5.08 (2) | 6.16 (1) / 5.73 (2) |
| COP | | | | 4.6 (1) / 2.75 (3) / 3.55 (2) / 2.10 (4) | 4.3 (1) / 2.65 (3) / 3.32 (2) / 2.08 (4) | 4.25 (1) / 2.64 (3) / 3.26 (2) / 2.09 (4) |
| EER | | | | 3.32 (1) / 2.72 (2) | 2.96 (1) / 2.47 (2) | 2.72 (1) / 2.29 (2) |



**Notes**

(1) Condition 1: cooling Ta 35°C - LWE 18°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C)

(2) Condition 2: cooling Ta 35°C - LWE 7°C ( DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C ( DT = 5°C )

(3) Condition 3: heating Ta DB -7°C (RH85%) - LWC 35°C

(4) Condition 4: heating Ta DB -7°C (RH85%) - LWC 45°C

| 2-5 Technical Specifications | | | | | ERLQ011CW1 | ERLQ014CW1 | ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Capacity control | Method | | | | Inverter controlled | | |
| Casing | Colour | | | | Ivory white | | |
| | Material | | | | Painted galvanized steel plate | | |
| Dimensions | Unit | Height | | mm | 1,345 | | |
| | | Width | | mm | 900 | | |
| | | Depth | | mm | 320 | | |
| | Packed unit | Height | | mm | 1,524 | | |
| | | Width | | mm | 980 | | |
| | | Depth | | mm | 420 | | |
| Weight | Unit | | | kg | 114 | | |
| | Packed unit | | | kg | 129 | | |
| Packing | Material | | | | Wood / Carton / EPS / PE (Straps) | | |
| | Weight | | | kg | 15 | | |
| Heat exchanger | Length | | | mm | 857 | | |
| | Rows | Quantity | | | 2 | | |
| | Fin pitch | | | mm | 1.4 | | |
| | Passes | Quantity | | | 7 | | |
| | Face area | | | m² | 1.131 | | |
| | Stages | Quantity | | | 60 | | |
| | Empty tubeplate hole | Quantity | | | 0 | | |
| | Tube type | | | | ø8 Hi-XSS | | |
| | Fin | Type | | | WF fin | | |
| | | Treatment | | | Anti-corrosion treatment (PE) | | |
| Fan | Type | | | | Propeller fan | | |
| | Quantity | | | | 2 | | |
| | Discharge direction | | | | Horizontal | | |
| Fan motor | Quantity | | | | 2 | | |
| | Model | | | | Brushless DC motor | | |
| | Output | | | W | 70 | | |
| | Drive | | | | Direct drive | | |
| | Speed | Steps | | | 8 | | |
| | | Heating | Nom. | rpm | 740 | 750 | 760 |
| | | Cooling | Nom. | rpm | 780 | | |
| Compressor | Quantity | | | | 1 | | |
| | Model | | | | JT1G-VDYR (B2) | | |
| | Type | | | | Hermetically sealed scroll compressor | | |
| | Output | | | W | 2,200 | | |
| | Starting method | | | | Inverter driven | | |
| | Motor | Crankcase heater | Output | W | 33 | | |

# 2 Specifications

| 2-5 Technical Specifications | | | | | ERLQ011CW1 | ERLQ014CW1 | ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Operation range | Heating | Min. | | °CWB | -25 | | |
| | | Max. | | °CWB | 35 | | |
| | Cooling | Min. | | °CDB | 10 | | |
| | | Max. | | °CDB | 46 | | |
| | Domestic hot water | Min. | | °CDB | -20 | | |
| | | Max. | | °CDB | 35 | | |
| Refrigerant | Type | | | | R-410A | | |
| | Charge | | | kg | 3.4 | | |
| | Control | | | | Expansion valve (electronic type) | | |
| | Circuits | Quantity | | | 1 | | |
| Refrigerant oil | Type | | | | Daphne FVC68D | | |
| | Charged volume | | | l | 1.5 | | |
| Piping connections | Liquid | Quantity | | | 1 | | |
| | | Type | | | Flare connection | | |
| | | OD | | mm | 9.52 | | |
| | Gas | Quantity | | | 1 | | |
| | | Type | | | Flare connection | | |
| | | OD | | mm | 15.9 | | |
| | Drain | Quantity | | | 3 | | |
| | | Type | | | Hole | | |
| | | OD | | mm | 26 | | |
| | Drain 2 | Quantity | | | 1 | | |
| | | Type | | | Hole | | |
| | | OD | | mm | 18 | | |
| | Piping length | OU - IU | Min. | m | 3 | | |
| | | | Max. | m | 50 | | |
| | | System | Equivalent | m | 70 | | |
| | | | Chargeless | m | 10 | | |
| | Additional refrigerant charge | | | kg/m | See installation manual | | |
| | Level difference | IU - OU | Max. | m | 30 | | |
| | Heat insulation | | | | Both liquid and gas pipes | | |
| Sound power level | Heating | Nom. | | dBA | 64 | | 66 |
| | Cooling | Nom. | | dBA | 64 | 66 | 69 |
| Sound pressure level | Heating | Nom. | | dBA | 51 | | 52 |
| | Cooling | Nom. | | dBA | 50 | 52 | 54 |
| | Night quiet mode | Heating | | dBA | 42 | | 43 |
| | | Cooling | | dBA | 45 | | 46 |
| Defrost method | | | | | Pressure equalising | | |
| Defrost control | | | | | Sensor for outdoor heat exchanger temperature | | |
| Safety devices | Item | 01 | | | High pressure switch | | |
| | | 02 | | | Fan motor thermal protection | | |
| | | 03 | | | Fuse | | |

| 2-6 Electrical Specifications | | | | ERLQ011CW1 | ERLQ014CW1 | ERLQ016CW1 |
|---|---|---|---|---|---|---|
| Power supply | Name | | | W1 | | |
| | Phase | | | 3N~ | | |
| | Frequency | | Hz | 50 | | |
| | Voltage | | V | 400 | | |
| | Voltage range | Min. | % | -10 | | |
| | | Max. | % | 10 | | |
| Current | Maximum running current | Heating | A | 16.3 | | |
| | | Cooling | A | 16.3 | | |
| | Recommended fuses | | A | 20 | | |
| Wiring connections | For power supply | Remark | | See installation manual outdoor unit | | |
| | For connection with indoor | Remark | | See installation manual outdoor unit | | |
| Power supply intake | | | | Outdoor unit only | | |

# 2 Specifications



**Notes**

(1) The sound pressure level is measured via a microphone at a certain distance from the unit. It is a relative value depending on the distance and acoustic environment. Refer to sound spectrum drawing for more information.

(2) Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C)

(3) Condition: Ta 35°C - LWE 7°C ( DT = 5°C)

(4) Operation range domestic hot water (outdoor unit): range increase by support booster heater

(5) Operation range heating (outdoor unit): range increase by support back-up heater

(6) See separate drawing for operation range

(7) European/International Technical Standard setting the limits for harmonic currents produced by equipment connected to public low-voltage systems with input current \>16A and \<= 75A per phase

(8) Minimum Ssc (=Short-circuit power) value: Equipment complying with EN/IEC 61000-3-12: European/International Technical Standard setting the limits for harmonic currents produced by equipment connected to public low-voltage systems with input current \>16A and ≤ 75A per phase

# 3 Options

## 3 - 1 Options

**ERLQ011-016C**

**Kit availability for *RLQ011-016C***

| | | *RLQ011C*V3 | *RLQ014C*V3 | *RLQ016C*V3 | *RLQ011C*W1 | *RLQ014C*W1 | *RLQ016C*W1 |
|---|---|---|---|---|---|---|---|
| *K016SNC (1) | Snow cover | ● | ● | ● | ● | ● | ● |
| KRP58M51 (2) | Demand PCB | ● | ● | ● | - | - | - |
| KRP58M51 (2) | Demand PCB | - | - | - | ● | ● | ● |

**NOTES**

1 It is very important to select an installation site where the snow will not affect the unit.
If lateral snowfall is possible, snow cover is recommended or make sure that the heat exchanger coil is not affected by the snow.
(See 'Installation service space' and 'Installation guideline/precaution outdoor')

2 This demand PCB option is only applicable for the 'Setting of demand running'

3TW60339-4

# 4 Capacity tables

## 4 - 1 Heating Capacity Tables

### ERLQ-CW1

**Maximum heating capacity - Peak values**

| | LWC [°C] | 30 | | 35 | | 40 | | 45 | | 50 | | 55 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Tamb [°C] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] |
| *RLQ011* | -20 | 8,64 | 3,87 | 8,61 | 4,22 | 8,61 | 4,64 | 7,99 | 4,89 | | | | |
| | -15 | 10,37 | 4,12 | 10,24 | 4,49 | 10,03 | 4,89 | 9,19 | 4,89 | 8,13 | 4,89 | | |
| | -7 | 10,79 | 3,33 | 10,41 | 3,62 | 10,04 | 3,97 | 9,83 | 4,28 | 9,45 | 4,80 | 8,39 | 4,89 |
| | -2 | 11,80 | 3,15 | 11,31 | 3,44 | 10,83 | 3,78 | 10,70 | 4,14 | 10,48 | 4,56 | 9,68 | 4,89 |
| | 2 | 11,91 | 2,83 | 11,33 | 3,10 | 10,75 | 3,42 | 10,69 | 3,71 | 10,32 | 4,05 | 9,72 | 4,49 |
| | 7 | 11,92 | 2,38 | 11,38 | 2,64 | 11,18 | 2,92 | 11,00 | 3,25 | 10,65 | 3,61 | 9,99 | 4,02 |
| | 12 | 12,93 | 2,31 | 12,31 | 2,56 | 12,20 | 2,85 | 12,02 | 3,18 | 11,69 | 3,55 | 11,01 | 3,96 |
| | 15 | 13,99 | 2,29 | 13,34 | 2,54 | 13,24 | 2,83 | 13,07 | 3,17 | 12,74 | 3,54 | 12,02 | 3,95 |
| | 20 | 15,90 | 2,23 | 15,20 | 2,49 | 15,13 | 2,79 | 14,98 | 3,13 | 14,22 | 3,51 | 13,46 | 3,93 |
| *RLQ014* | -20 | 10,54 | 5,17 | 10,49 | 5,52 | 10,37 | 5,89 | 8,45 | 5,89 | | | | |
| | -15 | 12,46 | 5,27 | 12,29 | 5,66 | 11,70 | 5,89 | 10,46 | 5,89 | 9,68 | 5,89 | | |
| | -7 | 14,01 | 4,73 | 13,69 | 5,16 | 13,40 | 5,64 | 12,88 | 5,89 | 11,51 | 5,89 | 10,26 | 5,89 |
| | -2 | 14,59 | 4,25 | 14,19 | 4,64 | 13,79 | 5,09 | 13,59 | 5,52 | 12,84 | 5,89 | 11,21 | 5,89 |
| | 2 | 14,78 | 3,79 | 14,30 | 4,13 | 13,81 | 4,53 | 13,39 | 4,88 | 12,90 | 5,29 | 12,38 | 5,84 |
| | 7 | 15,11 | 3,16 | 14,55 | 3,43 | 13,90 | 3,81 | 13,59 | 4,22 | 13,35 | 4,65 | 12,73 | 5,14 |
| | 12 | 15,99 | 3,06 | 15,36 | 3,36 | 14,74 | 3,71 | 14,40 | 4,10 | 14,18 | 4,53 | 13,54 | 5,01 |
| | 15 | 17,33 | 3,05 | 16,66 | 3,35 | 16,00 | 3,70 | 15,64 | 4,10 | 15,41 | 4,54 | 14,72 | 5,02 |
| | 20 | 19,77 | 3,02 | 19,04 | 3,33 | 18,30 | 3,68 | 17,92 | 4,09 | 17,17 | 4,53 | 16,41 | 5,02 |
| *RLQ016* | -20 | 11,52 | 5,85 | 11,64 | 6,26 | 11,56 | 6,59 | 9,26 | 6,58 | | | | |
| | -15 | 12,89 | 6,11 | 12,88 | 6,57 | 11,95 | 6,59 | 11,55 | 6,59 | 10,64 | 6,59 | | |
| | -7 | 15,23 | 5,27 | 14,89 | 5,71 | 14,54 | 6,19 | 13,74 | 6,59 | 12,42 | 6,59 | 11,12 | 6,59 |
| | -2 | 15,83 | 4,84 | 15,41 | 5,28 | 15,01 | 5,77 | 14,89 | 6,31 | 13,64 | 6,59 | 12,18 | 6,59 |
| | 2 | 16,09 | 4,30 | 15,62 | 4,68 | 15,16 | 5,14 | 14,97 | 5,55 | 14,43 | 6,18 | 13,46 | 6,59 |
| | 7 | 16,63 | 3,55 | 16,10 | 3,83 | 15,47 | 4,26 | 15,22 | 4,71 | 14,51 | 5,17 | 13,92 | 5,71 |
| | 12 | 17,34 | 3,45 | 16,74 | 3,78 | 16,13 | 4,15 | 15,76 | 4,58 | 15,13 | 5,05 | 14,51 | 5,58 |
| | 15 | 18,81 | 3,45 | 18,16 | 3,78 | 17,51 | 4,16 | 17,10 | 4,58 | 16,43 | 5,06 | 15,75 | 5,59 |
| | 20 | 21,49 | 3,43 | 20,77 | 3,77 | 20,04 | 4,15 | 19,59 | 4,59 | 18,83 | 5,07 | 18,07 | 5,61 |

**Maximum heating capacity - Integrated value**

| | LWC [°C] | 30 | | 35 | | 40 | | 45 | | 50 | | 55 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Tamb [°C] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] |
| *RLQ011* | -20 | 7,31 | 3,79 | 7,29 | 4,14 | 7,29 | 4,55 | 6,76 | 4,79 | | | | |
| | -15 | 8,78 | 3,99 | 8,67 | 4,36 | 8,49 | 4,75 | 7,78 | 4,76 | 6,88 | 4,78 | | |
| | -7 | 9,14 | 3,23 | 8,81 | 3,52 | 8,50 | 3,85 | 8,16 | 4,14 | 8,00 | 4,69 | 7,10 | 4,77 |
| | -2 | 9,56 | 3,00 | 9,16 | 3,27 | 8,77 | 3,59 | 8,56 | 3,90 | 8,59 | 4,38 | 7,84 | 4,69 |
| | 2 | 9,53 | 2,66 | 9,06 | 2,92 | 8,60 | 3,22 | 8,87 | 3,53 | 8,36 | 3,87 | 7,58 | 4,27 |
| | 7 | 11,92 | 2,38 | 11,38 | 2,64 | 11,18 | 2,92 | 11,00 | 3,25 | 10,65 | 3,61 | 9,99 | 4,02 |
| | 12 | 12,93 | 2,31 | 12,31 | 2,56 | 12,20 | 2,85 | 12,02 | 3,18 | 11,69 | 3,55 | 11,01 | 3,96 |
| | 15 | 13,99 | 2,29 | 13,34 | 2,54 | 13,24 | 2,83 | 13,07 | 3,17 | 12,74 | 3,54 | 12,02 | 3,95 |
| | 20 | 15,90 | 2,23 | 15,20 | 2,49 | 15,13 | 2,79 | 14,98 | 3,13 | 14,22 | 3,51 | 13,46 | 3,93 |
| *RLQ014* | -20 | 8,96 | 5,01 | 8,92 | 5,35 | 8,82 | 5,71 | 7,19 | 5,71 | | | | |
| | -15 | 10,34 | 5,06 | 10,20 | 5,43 | 9,71 | 5,65 | 8,90 | 5,66 | 8,24 | 5,69 | | |
| | -7 | 11,91 | 4,54 | 11,65 | 4,95 | 11,39 | 5,42 | 10,96 | 5,66 | 9,79 | 5,68 | 8,73 | 5,68 |
| | -2 | 11,38 | 3,81 | 11,07 | 4,16 | 10,76 | 4,56 | 10,46 | 4,92 | 10,20 | 5,33 | 8,92 | 5,33 |
| | 2 | 11,24 | 3,34 | 10,87 | 3,65 | 10,50 | 4,00 | 10,65 | 4,43 | 10,26 | 4,77 | 9,84 | 5,27 |
| | 7 | 15,11 | 3,16 | 14,55 | 3,43 | 13,90 | 3,81 | 13,59 | 4,22 | 13,35 | 4,65 | 12,73 | 5,14 |
| | 12 | 15,99 | 3,06 | 15,36 | 3,36 | 14,74 | 3,71 | 14,40 | 4,10 | 14,18 | 4,53 | 13,54 | 5,01 |
| | 15 | 17,33 | 3,05 | 16,66 | 3,35 | 16,00 | 3,70 | 15,64 | 4,10 | 15,41 | 4,54 | 14,72 | 5,02 |
| | 20 | 19,77 | 3,02 | 19,04 | 3,33 | 18,30 | 3,68 | 17,92 | 4,09 | 17,17 | 4,53 | 16,41 | 5,02 |
| *RLQ016* | -20 | 9,56 | 5,67 | 9,66 | 6,07 | 9,59 | 6,40 | 7,69 | 6,38 | | | | |
| | -15 | 10,57 | 5,84 | 10,56 | 6,28 | 9,86 | 6,30 | 9,55 | 6,34 | 8,79 | 6,38 | | |
| | -7 | 12,59 | 5,07 | 12,30 | 5,49 | 12,02 | 5,95 | 11,35 | 6,34 | 10,26 | 6,37 | 9,18 | 6,37 |
| | -2 | 12,11 | 4,32 | 11,79 | 4,71 | 11,48 | 5,15 | 11,39 | 5,63 | 10,44 | 5,86 | 9,32 | 5,86 |
| | 2 | 11,74 | 3,75 | 11,40 | 4,09 | 11,07 | 4,48 | 11,37 | 4,84 | 11,04 | 5,51 | 10,29 | 5,88 |
| | 7 | 16,63 | 3,55 | 16,10 | 3,83 | 15,47 | 4,26 | 15,22 | 4,71 | 14,51 | 5,17 | 13,92 | 5,71 |
| | 12 | 17,34 | 3,45 | 16,74 | 3,78 | 16,13 | 4,15 | 15,76 | 4,58 | 15,13 | 5,05 | 14,51 | 5,58 |
| | 15 | 18,81 | 3,45 | 18,16 | 3,78 | 17,51 | 4,16 | 17,10 | 4,58 | 16,43 | 5,06 | 15,75 | 5,59 |
| | 20 | 21,49 | 3,43 | 20,77 | 3,77 | 20,04 | 4,15 | 19,59 | 4,59 | 18,83 | 5,07 | 18,07 | 5,61 |

**Symbols:**

| | |
|---|---|
| HC | Heating capacity at maximum operating frequency, measured acc. EN14511 |
| PI | Power input, measured acc. EN14511 |
| LWE | Leaving Water Evaporator temperature |
| LWC | Leaving Water Condensor temperature |
| Tamb | Ambient temperature; RH (heating) = 85% |

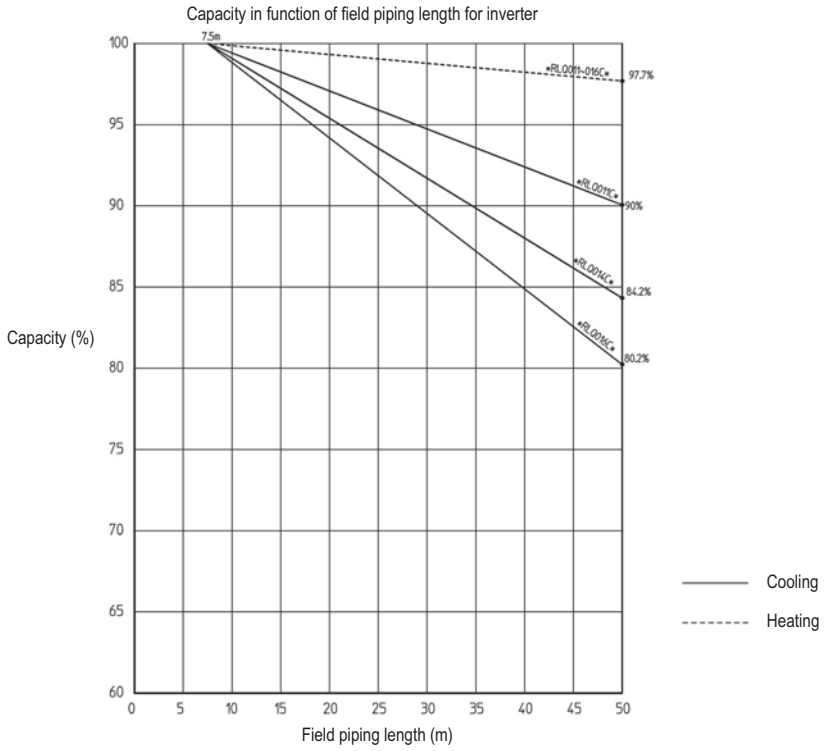
**Notes**:
- The bottom plate heater is controlled by outdoor unit (linked at defrost operation) and power input is included
- The capacity and power input is valid for V3-models at 230V or W1-models at 400V
- The capacity and power input for Ta ≦ 7°C is at maximum operation and power input 100%
- The capacity and power input for Ta > 7°C is at nominal operation (nominal = maximum)

3TW60332-1B

# 4 Capacity tables

## 4 - 1 Heating Capacity Tables

**ERLQ011-016C**




**NOTE**

Capacity drop is at nominal capacity

3TW60332-5A

# 4 Capacity tables

## 4 - 2 Cooling Capacity Tables

### ERLQ-CW1

**Maximum cooling capacity**

| | Tamb [°C] | 20 | | 25 | | 30 | | 35 | | 40 | | 45 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LWE [°C] | CC [kW] | PI [kW] | CC [kW] | PI [kW] | CC [kW] | PI [kW] | CC [kW] | PI [kW] | CC [kW] | PI [kW] | CC [kW] | PI [kW] |
| *RLQ011* | 7 | 12,99 | 3,26 | 12,88 | 3,57 | 12,44 | 3,92 | 11,72 | 4,31 | 10,74 | 4,74 | 9,54 | 5,22 |
| | 10 | 13,79 | 3,29 | 13,67 | 3,61 | 13,20 | 3,97 | 12,44 | 4,37 | 11,40 | 4,81 | 10,14 | 5,30 |
| | 13 | 15,16 | 3,33 | 15,02 | 3,65 | 14,51 | 4,02 | 13,67 | 4,43 | 12,54 | 4,88 | 11,00 | 5,54 |
| | 15 | 16,10 | 3,35 | 15,95 | 3,68 | 15,41 | 4,05 | 14,52 | 4,47 | 13,33 | 4,92 | 11,40 | 5,41 |
| | 18 | 17,77 | 3,38 | 17,18 | 3,72 | 16,26 | 4,11 | 15,05 | 4,53 | 13,61 | 4,99 | 11,54 | 5,00 |
| | 22 | 19,82 | 3,43 | 19,17 | 3,78 | 18,16 | 4,18 | 16,83 | 4,61 | 15,23 | 5,08 | 12,10 | 4,47 |
| *RLQ014* | 7 | 13,92 | 3,88 | 13,81 | 4,23 | 13,34 | 4,63 | 12,55 | 5,09 | 11,13 | 4,88 | 9,85 | 5,37 |
| | 10 | 14,98 | 3,94 | 14,85 | 4,30 | 14,34 | 4,71 | 13,49 | 5,18 | 11,97 | 4,96 | 10,61 | 5,46 |
| | 13 | 16,45 | 4,01 | 16,30 | 4,38 | 15,74 | 4,79 | 14,81 | 5,27 | 13,15 | 5,05 | 11,00 | 5,54 |
| | 15 | 17,46 | 4,05 | 17,30 | 4,43 | 16,71 | 4,85 | 15,73 | 5,33 | 13,97 | 5,11 | 11,40 | 5,41 |
| | 18 | 19,00 | 4,12 | 18,36 | 4,50 | 17,37 | 4,94 | 16,06 | 5,42 | 14,05 | 5,19 | 11,54 | 5,00 |
| | 22 | 21,16 | 4,21 | 20,45 | 4,61 | 19,36 | 5,06 | 17,93 | 5,55 | 15,71 | 5,31 | 12,10 | 4,47 |
| *RLQ016* | 7 | 14,55 | 4,39 | 14,46 | 4,79 | 13,98 | 5,24 | 13,12 | 5,74 | 11,59 | 5,48 | 9,85 | 5,37 |
| | 10 | 15,67 | 4,48 | 15,56 | 4,89 | 15,02 | 5,34 | 14,09 | 5,85 | 12,45 | 5,58 | 10,61 | 5,46 |
| | 13 | 17,22 | 4,57 | 17,08 | 4,99 | 16,48 | 5,45 | 15,47 | 5,96 | 13,67 | 5,68 | 11,00 | 5,54 |
| | 15 | 18,29 | 4,63 | 18,13 | 5,06 | 17,49 | 5,52 | 16,42 | 6,04 | 14,52 | 5,75 | 11,40 | 5,41 |
| | 18 | 19,91 | 4,73 | 19,23 | 5,16 | 18,17 | 5,63 | 16,76 | 6,15 | 14,60 | 5,85 | 11,54 | 5,00 |
| | 22 | 22,18 | 4,86 | 21,42 | 5,30 | 20,25 | 5,79 | 18,69 | 6,31 | 16,31 | 5,99 | 12,10 | 4,47 |

**Symbols:**

| | |
|---|---|
| CC | Cooling capacity at maximum operating frequency, measured acc. EN14511 |
| PI | Power input, measured acc. EN14511 |
| LWE | Leaving Water Evaporator temperature |
| LWC | Leaving Water Condensor temperature |
| Tamb | Ambient temperature ; RH (heating) = 85% |

**Notes**:
- The bottom plate heater is controlled by outdoor unit (linked at defrost operation) and power input is included
- The capacity and power input is valid for V3-models at 230V or W1-models at 400V
- The capacity and power input for Ta ≦ 7°C is at maximum operation and power input 100%
- The capacity and power input for Ta > 7°C is at nominal operation (nominal = maximum)

3TW603321-B

# 4 Capacity tables

## 4 - 3 Certification Programs



### ERLQ-CW1

Rated data for certification programs - Heating mode

| | | Certification program | Ta [°C] | EWC [°C] | LWC [°C] | HC [kW] | COP | Min. Required COP NF PAC | Min. Required COP EHPA | Min. Required COP Ecolabel | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *RLQ011C* | Floor | EHPA | 10 | | 35 | 11.20 | 4.85 | - | - | - | - | - | - | - |
| | | NF PAC | 7/6 | 30 | 35 | 11.20 | 4.60 | 3.40 | - | - | - | - | - | - |
| | | EHPA, Ecolabel | 2/1 | | 35 | 8.56 | 3.60 | - | 3.10 | 3.10 | - | - | - | - |
| | | NF PAC | -7/-8 | | 35 | 8.60 | 2.75 | 2.10 | - | - | - | - | - | - |
| | | | | | | | | - | - | - | - | - | - | - |
| | Fan coil | NF PAC | 7/6 | 40 | 45 | 11.00 | 3.55 | 2.70 | - | - | - | - | - | - |
| | | Ecolabel | 2/1 | | 45 | 8.20 | 2.84 | - | - | 2.60 | - | - | - | - |
| | | NF PAC | -7/-8 | | 45 | 8.60 | 2.10 | 1.60 | - | - | - | - | - | - |
| | | | | | | | | - | - | - | - | - | - | - |
| *RLQ014C* | Floor | EHPA | 10 | | 35 | 14.30 | 4.70 | - | - | - | - | - | - | - |
| | | NF PAC | 7/6 | 30 | 35 | 14.50 | 4.30 | 3.40 | - | - | - | - | - | - |
| | | EHPA, Ecolabel | 2/1 | | 35 | 10.30 | 3.41 | - | 3.10 | 3.10 | - | - | - | - |
| | | NF PAC | -7/-8 | | 35 | 10.00 | 2.65 | 2.10 | - | - | - | - | - | - |
| | | | | | | | | | | | | | | |
| | Fan coil | NF PAC | 7/6 | 40 | 45 | 13.60 | 3.32 | 2.70 | - | - | - | - | - | - |
| | | Ecolabel | 2/1 | | 45 | 10.00 | 2.70 | - | - | 2.60 | - | - | - | - |
| | | NF PAC | -7/-8 | | 45 | 10.80 | 2.08 | 1.60 | - | - | - | - | - | - |
| | | | | | | | | - | - | - | - | - | - | - |
| *RLQ016C* | Floor | EHPA | 10 | | 35 | 15.70 | 4.50 | - | - | - | - | - | - | - |
| | | NF PAC | 7/6 | 30 | 35 | 16.00 | 4.25 | 3.40 | - | - | - | - | - | - |
| | | EHPA, Ecolabel | 2/1 | | 35 | 11.10 | 3.35 | - | 3.10 | 3.10 | - | - | - | - |
| | | NF PAC | -7/-8 | | 35 | 11.10 | 2.64 | 2.10 | - | - | - | - | - | - |
| | | | | | | | | - | - | - | - | - | - | - |
| | Fan coil | NF PAC | 7/6 | 40 | 45 | 15.20 | 3.26 | 2.70 | - | - | - | - | - | - |
| | | Ecolabel | 2/1 | | 45 | 10.90 | 2.66 | - | - | 2.60 | - | - | - | - |
| | | NF PAC | -7/-8 | | 45 | 10.90 | 2.09 | 1.60 | - | - | - | - | - | - |
| | | | | | | | | - | - | - | - | - | - | - |

Rated data for certification programs - Cooling mode

| | | Certification program | Ta [°C] | EWC [°C] | LWC [°C] | CC [kW] | EER | Min. Required EER Ecolabel | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *RLQ011C* | Floor | Ecolabel | 35 | 23 | 18 | 15.05 | 3.32 | 2.20 | - | - | - | - | - | - |
| | Fan coil | Ecolabel | 35 | 12 | 7 | 11.72 | 2.72 | 2.20 | - | - | - | - | - | - |
| *RLQ014C* | Floor | Ecolabel | 35 | 23 | 18 | 16.06 | 2.96 | 2.20 | - | - | - | - | - | - |
| | Fan coil | Ecolabel | 35 | 12 | 7 | 12.55 | 2.47 | 2.20 | - | - | - | - | - | - |
| *RLQ016C* | Floor | Ecolabel | 35 | 23 | 18 | 16.76 | 2.72 | 2.20 | - | - | - | - | - | - |
| | Fan coil | Ecolabel | 35 | 12 | 7 | 13.12 | 2.29 | 2.20 | - | - | - | - | - | - |

Rated data for certification programs - Standby power consumption

| | Certification program | Taux |
|---|---|---|
| *RLQ011C*W1 | NF PAC | 25W |
| *RLQ014C*W1 | NF PAC | 25W |
| *RLQ016C*W1 | NF PAC | 25W |

**Symbols:**

CC : Cooling capacity at nominal operating frequency, measured acc. EN14511
HC : Heating capacity at nominal operating frequency, measured acc. EN14511
COP/EER : Coefficient of Performance/Energy efficiency ration acc. EN14511
LWE : Leaving Water Evaporator temperature [°C]
LWC : Leaving Water Condensor temperature [°C]
Ta : Ambient temperature [°C] DB/WB

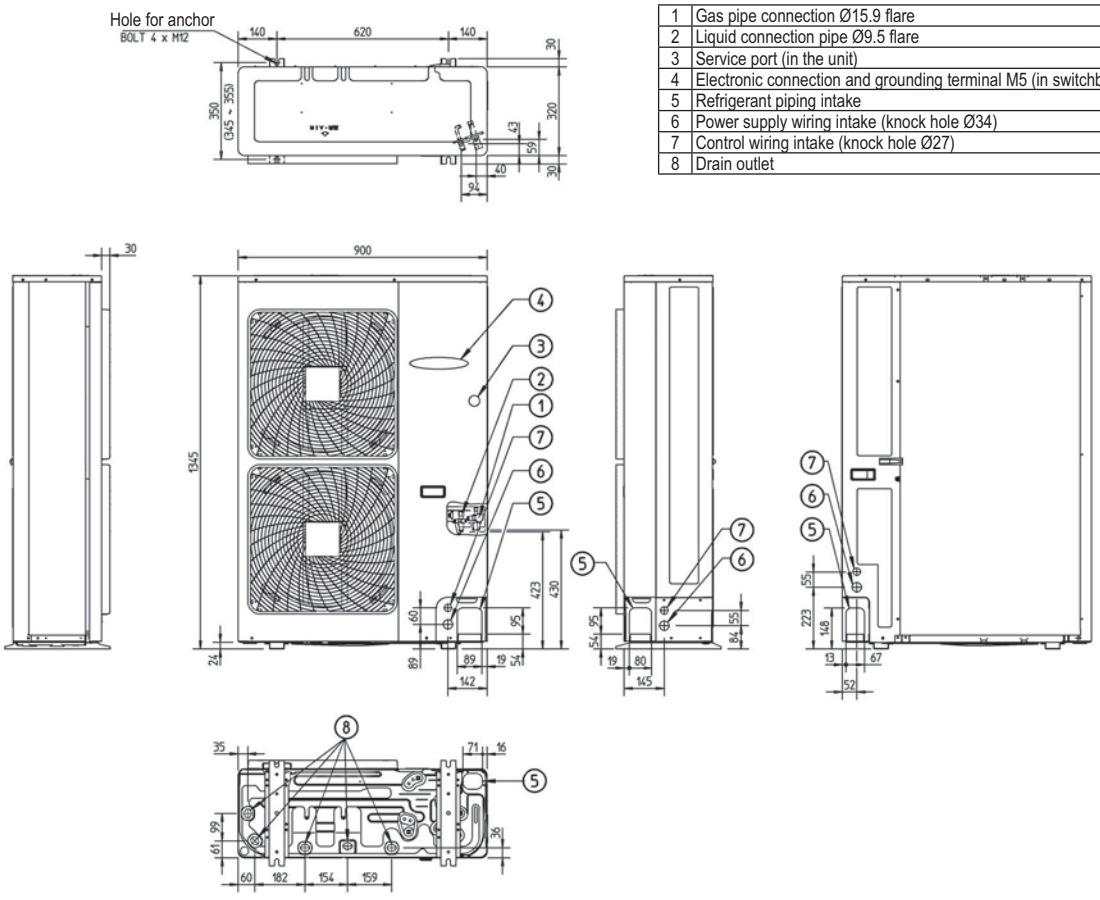
3TW60332-3C

# 5 Dimensional drawings

## 5 - 1 Dimensional Drawings



**ERLQ011-016CW1**



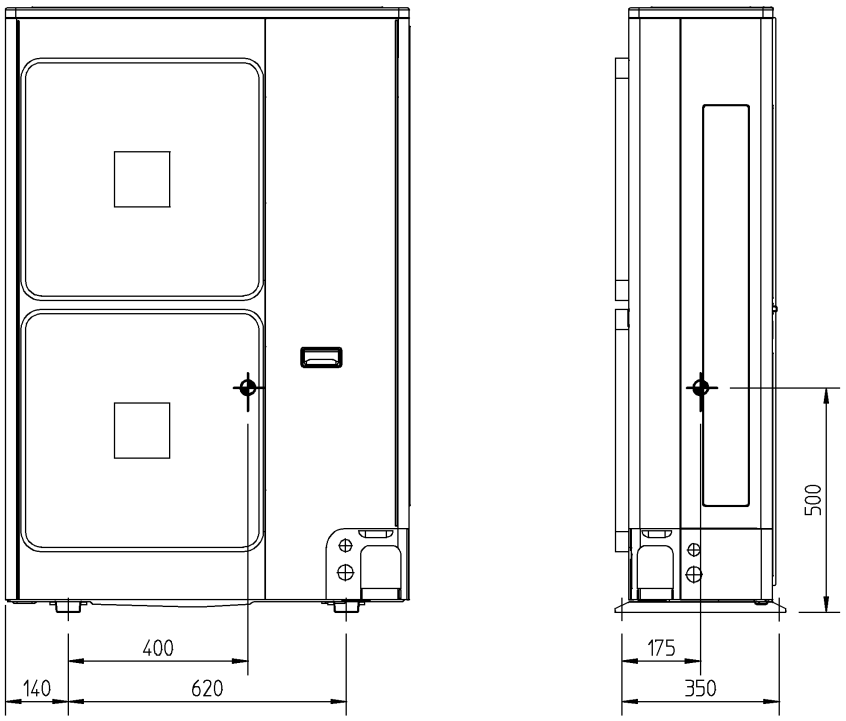

| | |
|---|---|
| 1 | Gas pipe connection Ø15.9 flare |
| 2 | Liquid connection pipe Ø9.5 flare |
| 3 | Service port (in the unit) |
| 4 | Electronic connection and grounding terminal M5 (in switchbox) |
| 5 | Refrigerant piping intake |
| 6 | Power supply wiring intake (knock hole Ø34) |
| 7 | Control wiring intake (knock hole Ø27) |
| 8 | Drain outlet |

3TW60334-1

# 6 Centre of gravity

## 6 - 1 Centre of Gravity

**ERLQ-CW1**




4TW57919-5

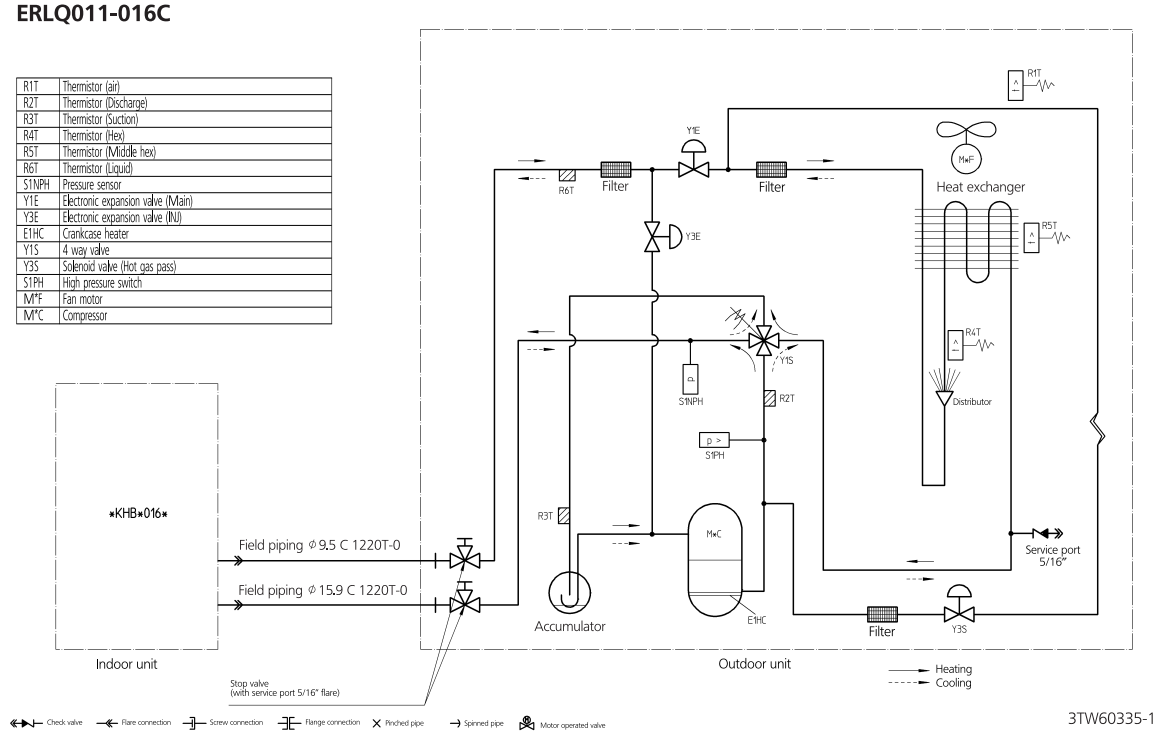
# 7 Piping diagrams

## 7 - 1 Piping Diagrams



**ERLQ011-016C**

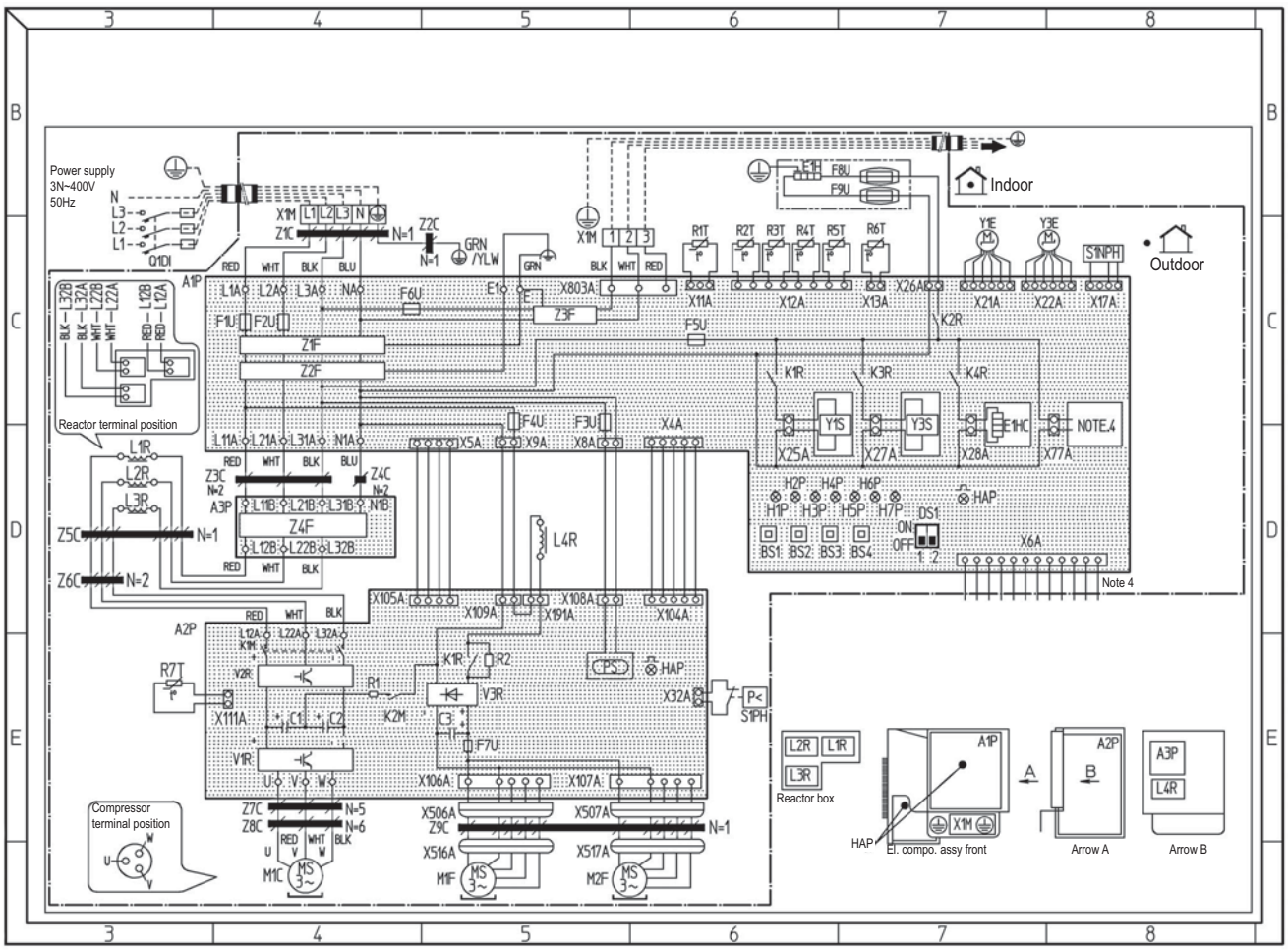
| | |
|---|---|
| R1T | Thermistor (air) |
| R2T | Thermistor (Discharge) |
| R3T | Thermistor (Suction) |
| R4T | Thermistor (Hex) |
| R5T | Thermistor (Middle hex) |
| R6T | Thermistor (Liquid) |
| S1NPH | Pressure sensor |
| Y1E | Electronic expansion valve (Main) |
| Y3E | Electronic expansion valve (INJ) |
| E1HC | Crankcase heater |
| Y1S | 4 way valve |
| Y3S | Solenoid valve (Hot gas pass) |
| M*F | Fan motor |
| M*C | Compressor |



# 8 Wiring diagrams

## 8 - 1 Wiring Diagrams - Three Phase

**ERLQ011-016CW1**




| | | | | | |
|---|---|---|---|---|---|
| A1P | Printed circuit board (control) | H1P~7P (A1P) | Pilot lamp (service monitor-orange) | R5T | Thermistor (heat exchanger middle) |
| A2P | Printed circuit board (inv) | K1M-K2M | Magnetic contactor (main - upload) | R6T | Thermistor (liquid) |
| A3P | Printed circuit board (noise filter) | K1R (A1P) | Magnetic relay (Y1S) | R7T | Thermistor (fin) |
| BS1~BS4 | Push button switch | K1R (A2P) | Magnetic relay (upload) | S1NPH | Pressure sensor |
| C1~C4 | Capacitor | K2R (A1P) | Magnetic relay (E1H) | SPH | Pressure switch (high) |
| DS1 | Dip switch | K3R (A1P) | Magnetic relay (Y3S) | V1R,V2R | Power module |
| E1HC | Crankcase heater | K4R (A1P) | Magnetic relay (E1HC) | V3R | Diode module |
| E1H | Bottomplate heater | L1R~L3R | Reactor | X1M | Terminal strip |
| F1U | Fuse (31.5A 500V) | L4R | Reactor (for outdoor fan motor) | Y1E | Electronic expansion valve (main) |
| F2U | Fuse (31.5A 500V) | M1C | Motor (compressor) | Y3E | Electronic expansion valve (inj) |
| F3U | Fuse (T 6.3A / 250V) | M1F | Motor (fan) (upper) | Y1S | Solenoid valve (4 way valve) |
| F4U | Fuse (T 6.3A / 250V) | M2F | Motor (fan) (lower) | Y3S | Solenoid valve (hot gas pass) |
| F5U | Fuse (T 6.3A / 250V) | PS | Swtiching power supply | Z1C~Z3C | Noise filter |
| F6U | Fuse (T 6.3A / 250V) | R1~R4 | Resistor | Z1F~Z4F | Noise filter |
| F7U | Fuse (T 5.0A / 250V) | R1T | Thermistor (air) | Q1DI | Earth leakage circuit breaker |
| F8U,F9U | Fuse (F 1.0A / 250V) | R2T | Thermistor (discharge) | Optional connector | |
| HAP (A1P) | Pilot lamp (service monitor-green) | R3T | Thermistor (suction) | X6A | Connector |
| HAP (A2P) | Pilot lamp (service monitor-green) | R4T | Thermistor (heat exchanger) | X77A | Connector |

2TW60336-1

**NOTES**

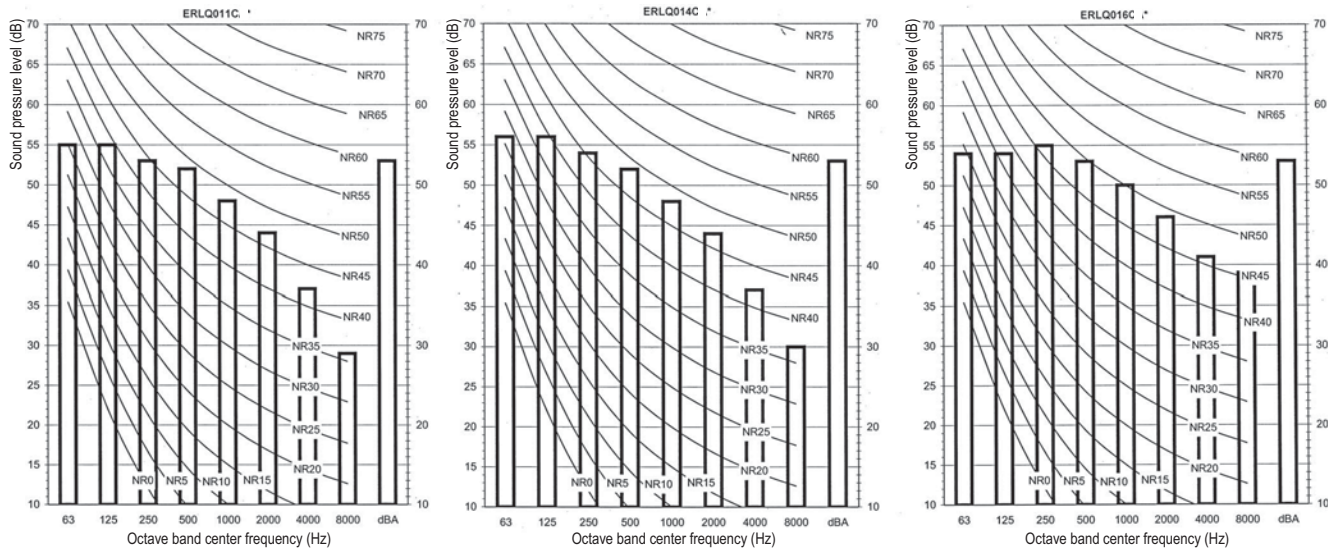
1. This wiring diagram only applies to the outdoor unit
2. L: live, N: neutral, ▭: field wiring
3. ▭▭▭: terminal strip, ▭○○▭: connector, —●—: connection, ⏚: protective earth (screw), —▬): connector, ⏚: noiseless earth, —○—: terminal
4. Refer to the option manual, for connecting wiring to X6A and X77A.
5. Refer to the 'wiring diagram sticker' (on back of front plate) on how to use BS1~BS4 and DS1 switch
6. Do not operate the unit by short-circuiting protection device S1PH
7. Colors: BLU= blue, BRN= brown, GRN= green, RED= red, WHT= white, YLW= yellow, ORG= orange, BLK= black
8. Confirm the method of setting the selector switches (DS1) by service manual; Factory setting of all switches: "off"
9. ▭: option, ⬚: wiring dependent on model

# 9 Sound data

## 9 - 1 Sound Pressure Spectrum - Heating



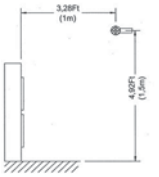
Heating




**NOTES**

1 Data is valid at free field condition (measured in a semi-anachoic room).
2 dBA = A-weighted sound pressure level. (A-scale according to IEC)
3 Reference acoustic pressure 0dB = 20µPa.
4 If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.
5 Data is valid at nominal capacity

Measuring location (discharge side):

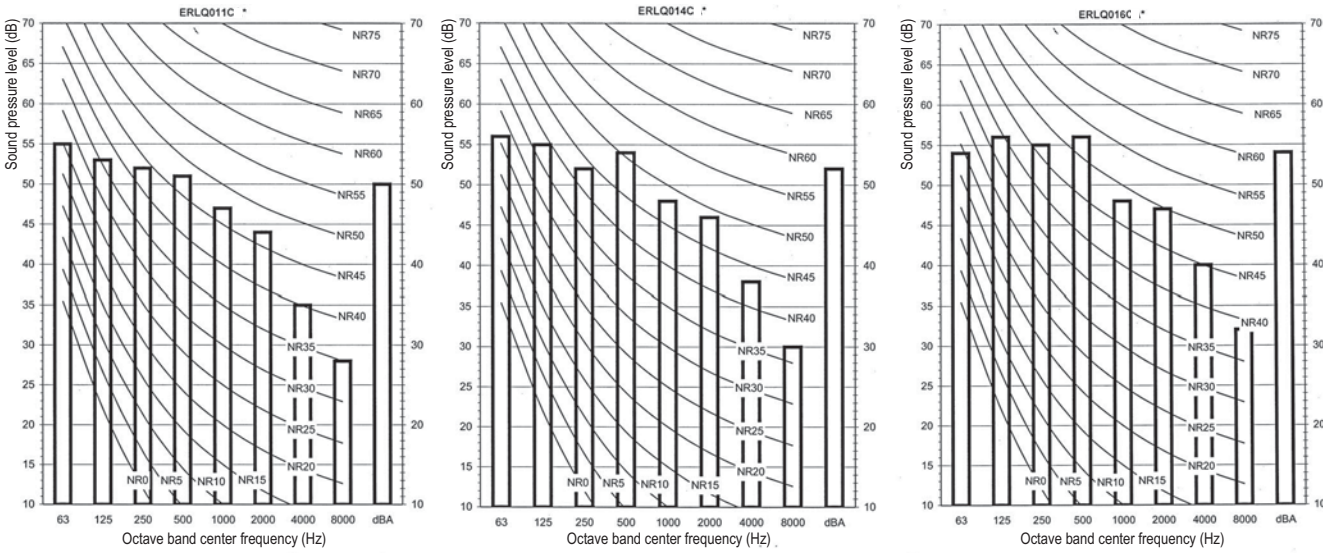



3TW60337-2

# 9 Sound data

## 9 - 2 Sound Pressure Spectrum - Cooling

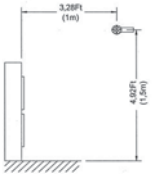
Cooling




**NOTES**

1 Data is valid at free field condition (measured in a semi-anachoic room).
2 dBA = A-weighted sound pressure level. (A-scale according to IEC)
3 Reference acoustic pressure 0dB = 20µPa.
4 If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.
5 Data is valid at nominal capacity

Measuring location (discharge side):



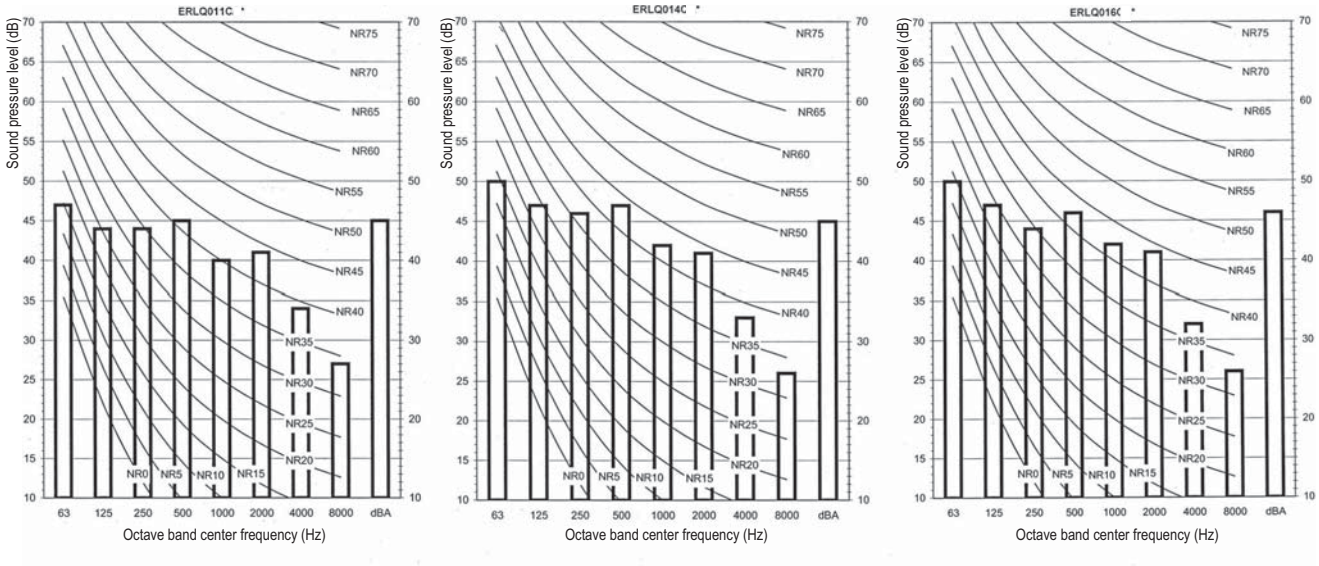

3TW60337-1

# 9 Sound data

## 9 - 3 Sound Pressure Spectrum Quiet Mode



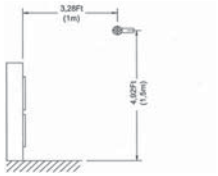
Cooling




**NOTES**

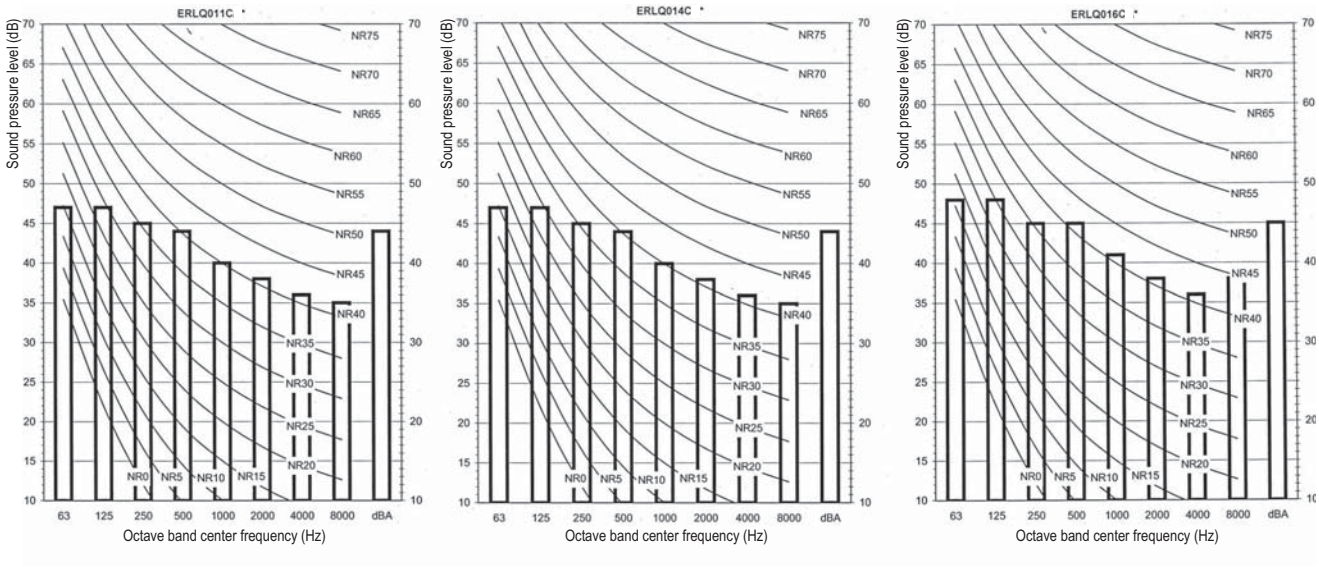
1 Data is valid at free field condition (measured in a semi-anachoic room).
2 dBA = A-weighted sound pressure level. (A-scale according to IEC)
3 Reference acoustic pressure 0dB = 20µPa.
4 If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.
5 Data is valid at night quiet mode level 2

Measuring location (discharge side):




3TW60337-3

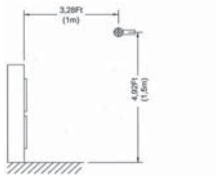
Heating




**NOTES**

1 Data is valid at free field condition (measured in a semi-anachoic room).
2 dBA = A-weighted sound pressure level. (A-scale according to IEC)
3 Reference acoustic pressure 0dB = 20µPa.
4 If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.
5 Data is valid at night quiet mode level 2

Measuring location (discharge side):



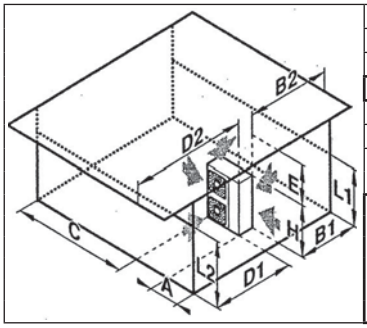

3TW60337-4

# 10 Installation

## 10 - 1 Installation Method

**ERLQ011-016C**

### Installation servicing space




| ↙ | ↗ | ↘ | ↖ | ↓ | | | A | B1 | B2 | C | D1 | D2 | E | L1/L2 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ✓ | | | | | | | | ≥200 | | | | | | | |
| ✓ | | ✓ | ✓ | | | | ≥200 | ≥200 | | ≥200 | | | | | |
| ✓ | | | | ✓ | | | | ≥200 | | | | ≥500 | ≥1000 | | |
| ✓ | | ✓ | ✓ | ✓ | | | ≥300 | ≥300 | | ≥300 | | ≥500 | ≥1000 | | 1 |
| | ✓ | | | | | | | | | | ≥500 | | | | |
| | ✓ | | | ✓ | | | | | ≥500 | | ≥500 | | ≥1000 | | |
| ✓ | ✓ | | | | L1<L2 | | | ≥200 | | | ≥500 | | | | |
| | | | | | L2<L1 | | | ≥200 | | | ≥500 | | | | |
| ✓ | ✓ | | | ✓ | L1<L2 | L1≤H | | ≥350 | ≥500 | | ≥750 | | ≥1000 | 0<L1≤1/2H | 2 |
| | | | | | | | | | | | ≥1000 | | | 0<L1≤1/2H | |
| | | | | | | ~~H<L1~~ | L1≤H | | | | | | | | |
| | | | | | L2<L1 | L2≤H | | ≥200 | | | ≥1000 | ≥500 | ≥1000 | 0<L2≤1/2H | |
| | | | | | | | | ≥300 | | | | | | 1/2H<L2≤H | |
| | | | | | | ~~H<L2~~ | L2≤H | | | | | | | | |

**NOTES**

Legend (Unit: mm)

- ↙ Suction side obstacle
- ↗ Discharge side obstacle
- ↘ Left side obstacle
- ↖ Right side obstacle
- ↓ Top side obstacle
- ✓ Obstacle is present
- ⊘ This situation is not allowed

1 Recommended installation set-up for the ERLQ011~016*
(to prevent exposure to wind or that the heat exchanger coil is affected by snow)

2 In these cases, close bottom of the installation frame to prevent discharged air from being bypassed

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# 10 Installation

## 10 - 1 Installation Method

**ERLQ011-016C**

### Installation guidelines / precautions Daikin Altherma

**Outdoor unit**



Installation location (general)

Select an installation site that meets the following requirements:

- The foundation must be strong enough to support the weight of the unit. The floor is flat to prevent vibrations and noise generation and to have sufficient stability.
- The space around the unit is adequate for maintenance/servicing and allows for sufficient air circulation.(Refer to “Installation and service space” information sheet}
- There is no danger of fire due to leakage of inflammable gas.
- The equipment is not intended for use in a potentially explosive atmosphere.
- Select the location of the unit in such a way that the sound and discharged cold/hot air generated by the unit does not disturb anyone, and the location is selected according the applicable legislation.
- All piping lengths and distances have been taken into consideration (refer to “Technical specification” information sheet).
- Take care that in the event of a water leak, water cannot cause any damage to the installation space and surroundings.
- Install units, power cords and inter-unit cables at least 3 m away from television and radio sets. This is to prevent interference to images and sounds.
- Depending on radio wave conditions, electromagnetic interference may still occur even if installed more than 3 m away.

Do not install in the following locations:

- Locations where sulphurous acids and other corrosive gases may be present in the atmosphere.
- Locations where a mineral oil mist, spray or vapour may be present in the atmosphere.
- Locations where flammable gases may leak, where thinner, gasoline and other volatile substances are handled, or where carbon dust and other incendiary substances are found in the atmosphere.
- In areas where the air contains high levels of salt such as that near the ocean.
- To prevent exposure to wind, install the outdoor unit with its suction side facing the wall.
- Never install the outdoor unit at a site where the suction side (left and back) may be exposed directly to wind, snow. (See “Installation and Service space” information sheet and figure 1)

Installation location (in cold climates)

- To prevent exposure to wind, install a baffle plate on the air discharge side of the outdoor unit.
- Unit should be installed in a way that a minimum of 10 cm free space is assured below the unit’s bottom plate at all conditions (prevent burying in snow), e.g.: heavy snowfall (if necessary construct a pedestal).
- In heavy snowfall areas it is very important to select an installation site where the snow will not affect the unit. Make sure that the heat exchanger coil (left and back side) is not affected by the snow (if necessary construct a lateral canopy and baffle plate on the air side).
- Recommended installation set-up. (See “Installation and Service space” information sheet and figure 2)

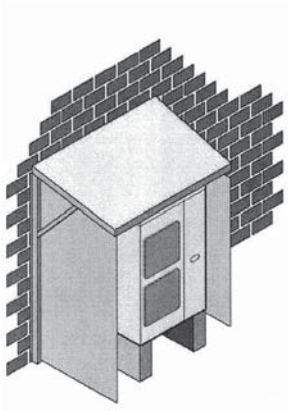

Figure 1: construction to prevent exposure to wind and snow

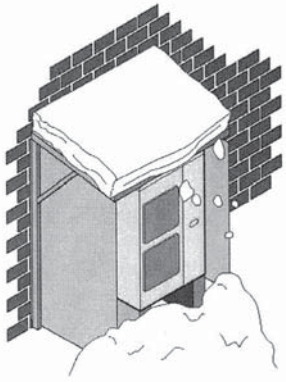

Figure 2: construction to prevent affect of snow to the unit

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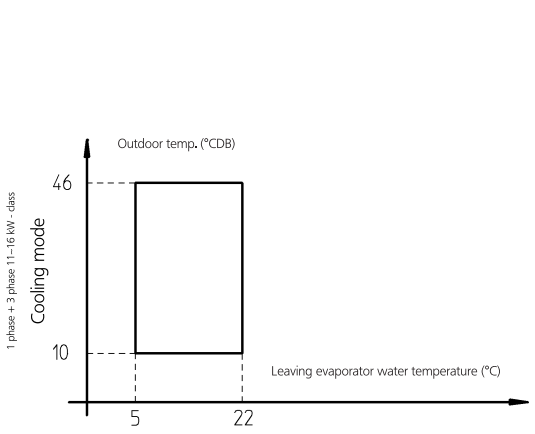
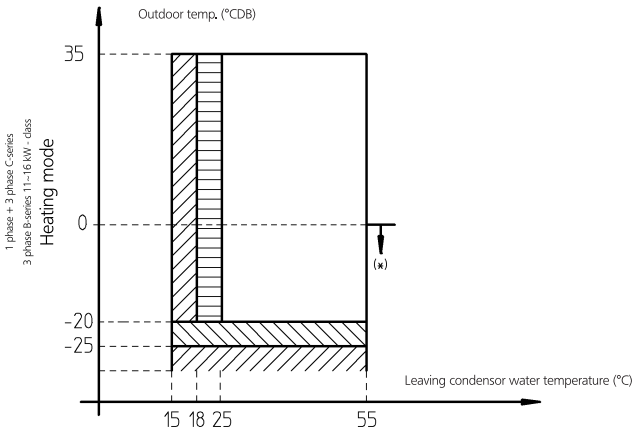
# 11 Operation range

## 11 - 1 Operation Range

**ERLQ-CW1**




LEGEND:

: Only backup heater operation (no outdoor unit operation)

: Outdoor unit operation if setpoint 25°C ≥

: Operation of outdoor unit possible, but no guarantee of capacity (if outdoor temperature < -20°C or < -25°C outdoor unit will stop ) (indoor unit and backup heater operation will continue)

: Pull down area

Remark: for restricted power supply condition mode outdoor unit, booster heater and back-up heater can only operate seperately.

(*) *RLQ units include special equipment (insulation, heater sheet, ...) to ensure good operation in areas where low ambient temperature can occur together with high humidity conditions. In such conditions the *RHQ models may experience problems with severe ice build up on the aircooled coil. In case such conditions are expected, the *RLQ must be installed instead. These models contain countermeasures (insulation, heater sheet, ...) to prevent freeze up.

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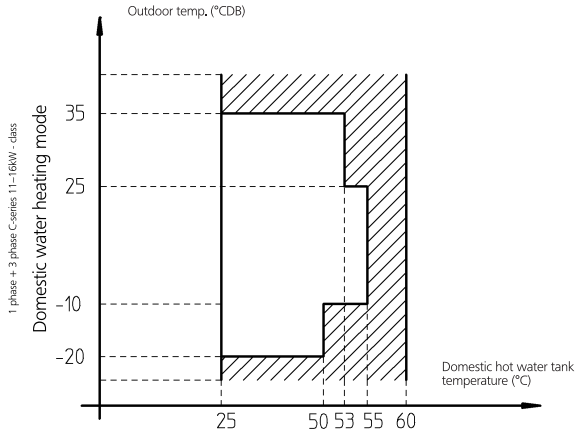
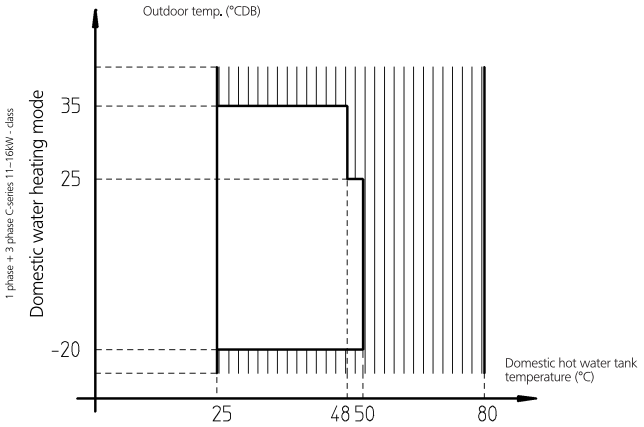
**ERLQ-CW1**




LEGEND:

: Only booster heater operation (EKHW* only)

: Only backup heater operation (EKHTS* only)

: Only booster heater operation (EKHW* only)
Only backup heater operation (EKHTS* only)

Remark: for restricted power supply condition mode (EKHW* only) outdoor unit, booster heater and back-up heater can only operate seperately.

3TW60343-2A

These products are not within the scope of the Eurovent certification program

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